# National Climatic Data Center DATA DOCUMENTATION

# FOR

DATA SET 6410 (DSI-6410)
RIVER FORECAST CENTER NETWORK MONTHLY PRECIPITATION

December 12, 2002

National Climatic Data Center 151 Patton Ave. Asheville, NC 28801-5001 USA

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1. Abstract: First, River Forecast Centers (RFC) is just a catch phrase. These daily precipitation reports are collected by the 12 RFC's and sent to the Climate Prediction Center's (CPC) National Center for Environmental Prediction (NCEP) via the Automated Forecast and Observation System (AFOS) in a SHEF-encoded message. These sites are predominately cooperative sites in the sense that many are also NCDC coop sites. Others belong to networks that do not fall within the standard cooperative network grouping.

Secondly, for daily precipitation reports, approximately 5,500 reports per day out of a total available set of 9,000 are incorporated. The 9,000 figure is the result of at least one report received at the CPC since February 1, 1997. Hourly precipitation is received from approximately 2,800 automatic sites every three hours from the Office of Hydrology's HADS system. About 5-6% overlap with the NCDC hourly network of paper-tape recorded precipitation.

This dataset contains monthly precipitation values on a per station basis for an average 5,500 sites. The CPC creates a file from this data that summarizes precipitation on a divisional basis. The CPC then passes this compiled divisional precipitation file to the NCDC for use in the *Climate Variations Bulletin*.

The Climate Variations Bulletin is a monthly publication that places in historical perspective, the most recent month, season, and/or year, for both temperature and precipitation. Data provided during the production process of the CVB is incorporated in the On-line Access and Service Information System (OASIS), an NCDC website that provides climate division temperature, precipitation, and drought data along with other data sets.

It cannot be stressed enough that this is operational data. The data undergoes no quality control at the NCDC and the extent of quality control at the NCEP is unknown. It is archived as received from the NCEP.

This dataset consists of data files on magnetic tape. Monthly files follow each other and are sequential. The magnetic tape and data file specifications are:

Record Length: Fixed 71 Characters. **Prior to February 1998,** columns 26

through 72 are fillers.

Record Length: Fixed 72 Characters after January 1998.

## 2. <u>Element Names and Definitions</u>:

Month in question: (ADATE) represents the month the data is for.

Information: (INFO) is standard for each file. States:

Both Type SHEF Precip Stations - (0.1 Inch)

Latitude: (LAT) a six-digit real number representing the latitude of the

station, in degrees and hundredths of degrees.

Longitude: (LON) a nine-digit real number representing the longitude of

the station, in degrees and hundredths of degrees.

Precipitation: (PCP) a four-digit real number representing the amount of precipitation, in tenths of inches, which was measured at the

site for the given month.

Call Sign: (CSGN) a 3, 4, or 5 character alpha-numeric "name" identifying the station. The call sign may be absent.

State: (ST) the official 2-character post office abbreviation.

Name: (NME) the actual name of the site.

Elevation: (EVL) the elevation of the station.

Number of Stations: (NSTN) a two-digit integer representing the number of stations used to calculate the average for the divisions

Each data file contains the precipitation data for one month. The first record in the file identifies the date (mon-dates-yr). The second record is blank. The third record states "Both Type SHEF Precip". The fourth record states "Stations - (0.1 Inch)". The fifth record states "60 yrmoed 1". The remaining records contain the precipitation data, one record per station. Data can be accessed using the following code fragment for months **prior to February 1998**:

Variables used in the code fragment are as follows:

Variable	Type	Width	Start	End
ADATE	Real	16	1	16
INFO	Character	21	1	21
LAT	Real	6	1	6
LON	Real	9	7	15
PCP	Real	6	16	21
CSGN	Character	6	23	28

For months after January 1998, a state abbreviation, station name, and station elevation appear. The following code fragment can be used:

Variables used in the code fragment are as follows:

Variable	Type	Width	Start	End
ADATE	Real	16	1	16
INFO	Character	21	1	21
LAT	Real	6	1	6
LON	Real	9	7	15
PCP	Real	6	16	21
CSGN	Character	8	22	29
NSTN	Integer	2	30	31
ST	Character	4	32	35
NME	Character	26	36	61
ELV	Integer	5	62	66

3. Start Date: 19960901

4. Stop Date: Ongoing.

5. <u>Coverage</u>: North America

A. Southernmost Latitude: 23N

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4:

B. Northernmost Latitude: 50NC. Easternmost Longitude: 55WD. Westernmost Longitude: 125W

### 6. How to Order Data:

Ask NCDC's Climate Services about the cost of obtaining this data set.

Phone: 828-271-4800 FAX: 828-271-4876

E-mail: NCDC.Orders@noaa.gov

### 7. Archiving Data Center:

National Climatic Data Center Federal Building 151 Patton Avenue Asheville, NC 28801-5001 Phone: (828) 271-4800.

Climate Prediction Center World Weather Building, Room 805 5200 Auth Road Camp Springs, MD 20846 Phone: (301) 763-8000 X7511

8. Technical Contact:

National Climatic Data Center Federal Building 151 Patton Avenue Asheville, NC 28801-5001 Phone: (828) 271-4800.

- **9.** Known Uncorrected Problems: No information provided with original documentation.
- 10. Quality Statement: The data undergoes no quality control at the NCDC and the extent of quality control at the NCEP is unknown. It is archived as received from the NCEP.

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- 11. Essential Companion Datasets: None.
- 12. References: No information provided with original documentation. Additional information can be obtained from the DPC at:

http://www.cpc.ncep.noaa.gov/index.html

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